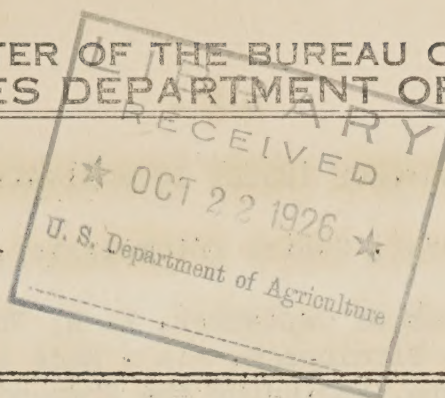


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MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
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FOREST INSECT INVESTIGATIONS

F. C. Craighead, Entomologist, in Charge

Dr. Craighead returned early in August from a two months' field examination of various control and research projects of the Division. Considerable time was spent in California, where an enormous amount of interest in control work has developed during the past two or three years. Private timberland owners are taking the initiative in urging the need for greater protection from losses by the barkbeetle. The unusually large forest fires in the summer interfered seriously with work in the Northern Rockies.

On his return from the West, Dr. Craighead stopped briefly at Halsey, Neb., where attempts are being made to control the tip moth by introducing parasites. About the middle of August he spent one week in the Northeast, investigating the white pine weevil.

The field men are now closing up their summer's work, and shortly all will have returned to winter headquarters in their respective regions.

Dr. Alfred E. Emerson, Professor of Ecology at the University of Pittsburgh, has been granted a Guggenheim fellowship for a year's study in Europe, to work on the phylogeny of termite castes. Dr. Emerson will visit termite specialists and museums in Italy, Sweden, and Denmark, and will also study in the field the primitive *Hodotermes* in Tunis. Dr. Snyder has prepared about 120 species of identified termites from the U. S. National Museum collection for comparative study and exchange with European museums by Dr. Emerson. Dr. Emerson visited the U. S. National Museum from September 20 to 23, and sails for Europe on September 29. He was given a dinner at the Cosmos Club on September 22 by entomologists and specialists of the Bureau of Entomology and the National Museum.

William Middleton recently visited West End, near Gordonsville, Va., where he is attempting to establish introduced parasites of the elm leaf beetle. The beetle infestation is rather heavy this year and the trees are showing severely the effects of years of defoliation.

Mr. Middleton has arranged the forest-insect collection of work specimens and placed it in cases for exhibit. It is expected to have the series increased, the names brought up to date, and the arrangement perfected as time and assistance permit. The exhibition is housed in drawers in new cases in the Forest Insect Laboratory Room of the Insectary Annex.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, Senior Entomologist, in Charge

During the first week of September, W. H. White, of the Washington office, and L. W. Brannon, Birmingham, Ala., made an inspection trip in certain sections of Virginia, including the Shenandoah and Page Valleys, in search of the Mexican bean beetle. This insect was found at Gore, Culpeper, and Luray.

A. C. Morgan, of the tobacco insect laboratory, Clarksville, Tenn., visited Columbus, Ohio, September 16 to 18, and conferred with N. F. Howard.

S. E. Crumb of Clarksville, Tenn., has been detailed temporarily to Tampa, Fla., where, in cooperation with one of the local cigar manufacturers, he will conduct vacuum fumigation experiments against the cigarette beetle.

Rodney Cecil, of Geneva, N. Y., has been temporarily detailed to the Columbus, Ohio, laboratory.

B. L. Boyden, Tampa, Fla., reports that the recent tropical storms did very little damage in Tampa. K. L. Cockerham, Biloxi, Miss., advises that the Gulf-coast region of Mississippi largely escaped the storm.

On September 2 H. L. Weatherby, recently of Athens, Ohio, visited the Washington office en route to Montgomery, Ala., and discussed the Mexican bean beetle problem in Ohio.

S. F. Chamberlin, Quincy, Fla., visited Washington the first week in September to confer with Bureau officials regarding the work on tobacco insects which is now under way in Florida.

R. E. Campbell, Alhambra, Calif., reports that on September 17 a number of Federal, State, County, and private entomologists met at the Bureau's laboratory in Alhambra, and formed the Entomologist Club of Southern California, with 28 charter members. The following officers were elected: President, H. J. Quayle; Vice President, R. S. Woglum; and Secretary-Treasurer, R. E. Campbell.

W. B. Cartwright and C. C. Wilson, of the Sacramento station, visited the Alhambra laboratory on September 16.

C. F. Henderson has been appointed Agent, effective September 15, and will sail from San Francisco on or about October 9 for South America to make studies of the sugar-beet leafhopper and its natural enemies. This work has been undertaken in cooperation with the University of California. He will probably first visit Tucuman, Argentina, where he will confer with Dr. G. L. Fawcett, Pathologist, of the Tucuman Agricultural Experiment Station.

J. N. Tenhet and K. B. McKinney, connected with the tobacco insect laboratory at Clarksville, Tenn., have been temporarily transferred to the Federal Horticultural Board, effective October 1, and will report to F. S. Puckett, Houston, Tex., for duty in connection with the pink bollworm service.

N. F. Howard, Columbus, Ohio, attended the annual convention of the Vegetable Growers Association at Cleveland, Ohio, September 14 to 16.

The temporary appointments of the following field assistants have been terminated in September: H. L. Weatherby (Athens, Ohio), H. Beerman (Philadelphia, Pa.), and W. J. Douglass (Estancia, N. M.)

Dr. D. M. DeLong has resigned his temporary appointment as field assistant at Columbus, Ohio, to resume his professorship in entomology at the Ohio State University.

C. O. Bare, Plant City, Fla., has been transferred to Tampa, Fla.

Summer Camp for Pea Aphis Study at Columbus, Wis.

Field control of the pea aphis is possible over a season lasting only six weeks. In order that the entire work on this project might, without distracting influences, be concentrated on the maximum production of results, a field camp, including 20 acres of experimental plots, and provided with suitable laboratory and other quarters for the staff of six men, a stenographer, and a cook, was organized at Columbus, Wis., in June by J. E. Dudley, Jr., in charge of the Madison, Wis., pea aphis laboratory. At the camp breakfast was served at 6:30 and supper at 5:30. The entire force was thus available for research and control work from 7:00 to 5:30, the evenings being occupied with recreation and conference. The camp was broken about the middle of August.

The constant close contacts thus brought about led to an exceptionally excellent morale and esprit du corps, and the discussions each evening aided in the solution of many small problems as they arose. Together with the tendency to spend long hours in the field, these factors contributed in no small degree to exceptionally efficient research, and it is Mr. Dudley's belief that the advantages of such an arrangement far outweigh any difficulties in connection with its organization.

DECIDUOUS-FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Associate Chief of Bureau, in Charge

R. F. Sazama, who has been associated with Dr. Porter at Vincennes, Ind., in connection with apple insect investigations, has been given a furlough for one year, to undertake graduate studies at the Massachusetts Agricultural College.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. H. Larrimer, Entomologist, In Charge

Dr. L. O. Howard visited the Arlington Laboratory on September 1, to consult with D. W. Jones regarding the details of the parasite project.

R. C. Ellis, of the Arlington laboratory, left for the Monroe, Mich., corn borer laboratory on September 12, conveying mated adults of Phaeogenes planifrons Wesm., and Angitia (Diocetes) punctoria Roman, two of the introduced parasite species. In cooperation with Dr. Luginbill, Mr. Ellis released these adults under favorable conditions in the infested fields of southeastern Michigan.

Dr. T. J. Headlee, State Entomologist of New Jersey, and C. H. Hadley, Director, Pennsylvania Bureau of Plant Industry, were at the Arlington laboratory on September 13 and 14. They examined the field and laboratory experiments in progress and made a tour of inspection in the field. Opportunity was also afforded to observe quarantine operations at the Boston market. Dr. Headlee and Mr. Hadley planned to continue their tour of observation in the corn-borer infested areas of eastern New York and the Middle West.

On September 7 and 8 Dr. Philip Luginbill and A. R. Marston, of the Monroe laboratory, accompanied Prof. R. H. Pettit, of the Michigan State College, on an observation tour in the districts infested with the corn borer in Essex and Kent Counties, Ontario.

Prof. George A. Dean and W. P. Flint, accompanied by L. H. Worthley and D. J. Gaffrey, made an inspection of corn borer conditions in Michigan, Ohio, and Ontario, during the period August 23 to 26.

J. S. Wade returned to Washington on September 15, after spending a month assisting in the corn borer investigations in Michigan.

Recent arrivals of corn borer parasite material from Europe include:

<u>Phaeogenes planifrons</u> Wesm.	17,017
<u>Angitia punctoria</u> Roman	11,209
<u>Microgaster tibialis</u> Nees.	5,752
<u>Eulimneria crassifemur</u> Thom.	973
<u>Masicera senilis</u> Rond.	1,652

Adults issuing from this material have been mated and released under favorable conditions in New England and in the Middle West. Establishment of the first four species has been definitely proven.

About the middle of August an infestation survey in the portion of eastern New York where the corn borer was discovered in 1919, just north of Schenectady, revealed an increase of over 300 per cent in larval population since the last comparable survey was made of that area in 1924.

Prof. W. C. O'Kane and W. A. Osgood, of the New Hampshire Agricultural Experiment Station, and H. N. Worthley, Extension Entomologist of Pennsylvania, were recent visitors at the Arlington laboratory.

L. H. Patch, of the Sandusky, Ohio, corn borer laboratory, is making the annual infestation survey in Ohio. H. N. Bartley, of the Silver Creek, N. Y., laboratory, is similarly engaged in western New York.

Visitors to the Sugarcane Insect Laboratory at New Orleans in September included Dr. H. Atherton Lee, plant pathologist of the Hawaiian Sugar Planters' Experiment Station, Dr. D. L. Van Dine, in charge of the Cuba Sugar Club Experiment Station, and H. K. Plank, formerly of the Bureau, and now engaged in studying the sugarcane moth borer in Cuba for the Tropical Plant Research Foundation.

COTTON INSECT INVESTIGATIONS

INVESTIGATIONS OF INSECTS AFFECTING THE HEALTH OF MAN AND DOMESTIC ANIMALS

J. L. Webb, Associate Entomologist, Acting in Charge

In August F. C. Bishopp gave talks on the control of poultry parasites at a series of district meetings held at Sweetwater and Stephenville, Tex., under the auspices of the Texas Farm Bureau. He also discussed the work of the Bureau on Insects affecting livestock at the "round up" held at the Texas Experiment Substation No. 14, located in the heart of the ranch country near Sonora. On this trip he also visited the Bureau substations at Sonora and Uvalde, as well as the extensive project on the control of the screw worm which is being carried out by ranchmen in Menard County, under the direction of County Agent R. W. Nisbet. The plan followed is that recommended by the Bureau, and the test is being closely watched.

Dr. G. F. White spent the month of September at Jacksonville Beach, Fla., cooperating with W. E. Dove in investigations of creeping eruption.

Ellis C. Pattee has been appointed Junior Chemist, and Richard Henry Howe and George W. Bamberg Field Assistants, at the Boll Weevil Laboratory at Tallulah, La.

Appointments of J. W. Wilson, J. C. Pearson, G. L. Hales, R. B. Carr, H. T. James, L. F. Greer, Franklin Sherman III, W. H. Wilson, W. W. Brunson, L. R. Thompson, W. A. Brunson, W. A. Shands and D. L. Wray, temporary Field Assistants in boll weevil investigations, terminated in September.

GIPSY MOTH AND BROWN-TAIL MOTH INVESTIGATIONS

A. F. Burgess, Senior Entomologist, in Charge

Late in August A. F. Burgess and H. L. Blaisdell visited the area in New Jersey infested by the gipsy moth, and the infestations on Long Island. They were accompanied by H. L. McIntyre, of the New York Conservation Commission, on the inspection trip on Long Island. Later in the month Messrs. Burgess and Blaisdell visited the sections in New York and Vermont where field control work against the gipsy moth is being conducted.

Dr. L. O. Howard visited the office and laboratory at Melrose Highlands, Mass., on September 1, and conferred with various men engaged in experimental and research work.

Dr. H. Prell, of Germany, visited the Gipsy Moth Laboratory early in September, and evinced considerable interest in the methods used of importing, rearing, and colonizing parasites of the gipsy moth and the brown-tail moth, as well as in the methods of conducting field control work against these insects.

Reports from various sections of the infested territory indicate a noticeable increase in the number of gipsy moth egg-clusters. This is particularly true of the territory south of Boston and on Cape Cod, where heavy defoliation occurred during the past summer.

Early in September A. F. Burgess, in company with Messrs. Arthur Gibson, L. S. McLaine, and S. H. Short, of the Dominion Department of Agriculture, made an inspection trip along the international line between Quebec and Vermont, where scouting work is being done by the Canadian Government and the Bureau of Entomology.

On September 8, at Rutland, Vt., A. F. Burgess attended a conference with officials of the State of Vermont concerning gipsy moth work; and on September 9 he attended the State gipsy moth quarantine hearing at Hartford, Conn.

Ray T. Webber, who has been for several months in Europe and Northern Africa, returned to the Melrose Highlands Laboratory September 25. Mr. Webber reports a successful season in collecting and shipping parasitic material to this country, to assist in controlling the gipsy moth and the brown-tail moth.

Harrison M. Tietz resigned September 7, 1926. Mr. Tietz has accepted a position with the Pennsylvania State College, where he will teach entomology.

BEE CULTURE INVESTIGATIONS

James I. Hambleton, Apiculturist, in Charge

Jas. I. Hambleton, E. L. Sechrist, and J. E. Eckert attended the Root-Langstroth Memorial meeting at Medina, Ohio, on September 21, 22, and 23. This meeting was held in honor of two of the pioneers in the history of beekeeping in this country, and drew the largest attendance of any similar meeting in recent years. A notable feature of the meeting was an account of the recent trip made by Doctor and Mrs. E. F. Phillips, in visiting many beekeepers in Switzerland, France, and England.

A beekeeping exhibit has recently been established in the Old National Museum of the Smithsonian Institution. The first section of the exhibit consists of a two-story glass observation hive, which has a 12-foot glass tunnel to the outside entrance. This exhibit was made possible through the generosity of the A. I. Root Co., Medina, Ohio, and Dadant and Sons, Hamilton, Ill., manufacturers of beekeeping supplies. The colony of bees was furnished and installed by the Bee Culture Laboratory. The exhibit has received rather unusual attention and publicity.

A new book on the subject of beekeeping, entitled "Honey Bees and Fairy Dust," has recently been published by Mrs. Mary G. Phillips, the wife of Dr. E. F. Phillips. It is intended primarily for children. The delightful manner in which the subject is presented makes the book one of the noteworthy offerings of the year.

TAXONOMIC INVESTIGATIONS

S. A. Rohwer, Entomologist, in Charge

Dr. A. Lutz, of Brazil, and Dr. M. Nunez-Tovar, of Venezuela, are preparing an extensive paper on the biting flies of Venezuela. In this work they find it necessary to send considerable material to the Division of Insects for identification. The mosquitoes are being studied by Dr. H. G. Dyar, and the tabanids by Dr. Aldrich; in this way many valuable specimens of biting flies of Venezuela are being added to the National Collection.

In September Harold Morrison completed the requirements for the degree of Doctor of Science, Bussey Institution, Harvard University.

Beginning September 9 Dr. Grace H. Griswold, of Cornell University, spent a week in Washington, during her stay consulting the specialists in the Division of Insects with reference to work on her problem, the insect pests of greenhouse plants.

JAPANESE BEETLE INVESTIGATIONS

Loren B. Smith, Entomologist, in Charge

On Friday afternoon, September 3, Governor A. Harry Moore, accompanied by Secretary W. B. Duryee, of the State of New Jersey, and the former's official retinue, paid the Japanese Beetle Laboratory at Riverton a short visit. He was conducted through the various laboratories, where he gained an insight into the main features of the project. The Governor was particularly interested in the importation of parasites from foreign countries, the physiological researches, and the question of arsenical deposits on fruits. He appeared favorably impressed with the extensive studies now being conducted. The visit to the laboratory was planned in connection with the Governor's trip to the Exposition of Southern New Jersey, in Camden, where he addressed the fair-goers as a feature of the Governor's Day Exercises.

On September 25 J. W. Wilson, recently Field Assistant, Boll Weevil Operations, Florence, N. C., visited the Laboratory while on his way to Bussey Institution, Forest Hills, Mass., where he will continue his studies on the morphology of the Coccinellidae.

Dr. Heinrich Prell, of Germany, recently spent several days at the Japanese Beetle Laboratory, studying the several phases of the project.

The Japanese beetle has recently been found at several points along the Hudson River, between Ossining, N. Y., and New York City. Several small infestations have also been found on the southern third of Long Island, and it is known to occur at Port Chester, N. Y., and Stamford, Conn. It has been found outside the quarantine area in Pennsylvania, at Easton, Allentown, Bethlehem, Lancaster, and Harrisburg. At a public hearing held in Washington September 25, the area under quarantine was extended to include the territory mentioned. It is anticipated that the new quarantine lines will become operative October 10, 1926.

On account of the disappearance of the adult Japanese beetle, thereby rendering the unrestricted movement of farm products safe in so far as danger of carrying the insect is concerned, the regulation restricting the movement of farm produce from the Japanese beetle area was discontinued, effective October 1, 1926, instead of October 15, 1926.

LIBRARY

Mabel Colcord, Librarian

NEW BOOKS

Abderhalden, Emil.

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Asprea, V.

... L'Allevamento delle api regine per apicoltori diletteanti e industriali... 274 p., illus. Milano, Ulrico Hoepli, 1926. (At head of title: Manuali Hoepli.)

Attems, Carl.

Myriopoda: Diplopoda. 128 p. Berlin u. Leipzig, 1926. (Handbuch der Zoologie Bd. 4, Lfg. 1.)

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Psyllidae of South America. Broteria. Ser. Zool., v. 22, fasc. 2, p. 56-74, 1925.

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Die Hausinsekten und ihre Bekämpfung. 100 p., illus. Paul Parey, Berlin, 1926.

Faure, J. C.

Contribution à l'étude d'un complexe biologique; la piéride du chou (*Pieris brassicae* L.) et ses parasites hyménoptères. 221 p., 7 pl. Imprimerie Bosc frères & Riou, Lyon, 1926. (Bibliographie, p. 211-221.)

Hall, C. A.

Bees, wasps, and ants. 88 p., pl. A. & C. Black, London, 1925. (Peeps at nature, ed. by Rev. C. A. Hall.)

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The hibiscus mealy bug (*Phenacoccus hirsutus* Green) in Egypt in 1925, with notes on the introduction of *Cryptolaemus montrouzieri* Muls. (Egypt. Ministry of agriculture. Tech. & Sci. Service. Bul. 70.) 15 p., 4 pl., map. Cairo, 1926.

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Diocalandra taitensis (Guerin) and other coconut pests of Fanning and Washington Islands. Philippine Jour. Sci., v. 30, No. 2, p. 243-274, illus., 8 pl., June, 1926.

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The anatomy of a British phytophagous chalcidoid of the genus *Harmolita* (Isosoma.) Proc. Zool. Soc. London 1926, Part I, p. 75-182, illus., 8 pl., April, 1926. (Bibliography, p. 174-182.)

Kieffer, J. J.

Hymenoptera: Scelionidae. 885 p., illus. Walter de Gruyter & Co., Berlin & Leipzig, März, 1926. (Das Tierreich, Lief. 48.)

Knull, J. N.

The Buprestidae of Pennsylvania (Coleoptera). (Ohio state university. University studies v. 2, No. 11: Contributions from the Dept. of Zool. and Entom. No. 87.) 71 p., incl. pl., Dec. 15, 1926. (List of publications consulted, p. 58-60.)

Kuwana, Inokichi.

The diaspine Coccidae of Japan IV. Genera *Cryptoparlatoria*, *Howardia*, *Sasakiaspis*, *Diaspis*, *Aulacaspis*, *Pinnaspis* and *Prontaspis*. (Japan. Dept. of Finance Imperial Plant Quarantine Service Tech. Bul. No. 4.) 44p., 12 pl. Yokohama, Japan, 1926.

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Economic poisons (1925-1926). (California Dept. Agr. Special Pub. No. 66.) 37 p. John E. King, State printer, Sacramento, 1926.

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